VERMONT URBAN AND COMMUNITY FORESTRY PROGRAM

EAB Municipal Management Case Study

Richmond, Vermont

APPROACH

Ash tree treatment and removal, interplanting, replacement plantings, wood utilization

SUMMARY

In the spring of 2020, the Richmond Conservation Commission, town officials, and local volunteers anticipated the imminent arrival of emerald ash borer (EAB) in the region and assembled a Richmond EAB task force charged with assessing the geographic impact of the beetle and planning for continued resilience of the downtown tree canopy. The group promptly began an ash tree inventory of some of Richmond's public ways and places and, quickly after completion of the inventory, applied for funding to address ash tree management in the village center, in high visibility areas, in neighborhoods, and in the rural right-ofway. The municipality was awarded a \$15,000 grant in 2021 from the Vermont Urban & Community Forestry Program to treat or remove ash trees, plant non-ash tree species, and plan for wood utilization of both wood chips and logs.

In April of 2021 just prior to Arbor Day, the task force mailed 2,200 postcards to all Richmond residents informing them of the town's upcoming response to EAB, provided outreach regarding EAB including awareness about vtinvasives.org, and information about ash tree care options available to private landowners. The following month, Limbwalker Tree Service treated 21 ash trees with a systemic, trunk-injected pesticide containing emamectin benzoate. Treated ash trees are located on Bridge Street (five trees), Depot Street Extension (two trees) Church Street (11 trees), Cochran Road (one multi-stemmed tree), Baker Street (one 40-inch DBH), and near the parking area of the Andrews Community Forest (one tree). A total of 300 diameter inches of ash were treated for \$3,000.

Also in May 2021, Limbwalker Tree Service removed six downtown ash trees not slated for insecticide treatment. Four of these trees were located on Bridge Street (one in front of public library, one in front of Congregational Church, two near the Round Church) and two were located on Church Street where a monoculture of ash trees are gradually being replaced. Removal, brush chipping, stump grinding, and transport of the logs to a municipal lot on Cochran Street cost \$3,600.

The grant-funded project work continued in June of 2021 with the planting of 10 trees within the municipal right-of-way, municipal parks, and on other municipal properties. Planting locations correlated with downtown ash removal locations. Three flowering pears and one hackberry were planted on Church Street between existing ash trees; one hackberry, one burr oak, and two red maples were sited near the Round Church; and one burr oak and one crabapple were planted in front of the library and opposite the ash removals near the Congregations Church. Limbwalker Tree Service sourced these 2-inch caliper trees from Horsford Garden & Nursery in Charlotte, transported and planted them at a cost of \$750 per tree. Ongoing watering and maintenance has been provided by the EAB Task Force and volunteers.

The final phase of the project concluded in February and March of 2022 with removals of approximately 30 ash trees over 12" DBH along Dugway Road and Cochran Road. Limbwalker Tree Service completed the tree removals and transportation of logs to a public lot on Cochran Road for processing. Limbwalker chipped the branches and brush and distributed the chips into the woods on site. Two landowners kept the downed wood for personal use; remaining logs were transported to a municipal lot on Cochran Road. The municipality will offer some ash wood for free to a local firewood distribution non-profit or to residents in need of firewood who could buck, split, and transport the wood to their local homes. Other wood will be milled in-place using a portable sawmill cut to 5/4 with live edges. The municipality hopes to use this wood on municipal properties, in municipal buildings, or to support local artisans and craftspeople. The total project cost for tree removal and log transportation by Limbwalker Tree Service was \$18,950. The original consultation and flagging of trees for removal cost \$400 and the milling of some of the larger logs will cost \$400.

FAST FACTS

Population: 4,081

Miles of Town Maintained Roads: 47

Number of Ash Inventoried on Town Roads Prior to Removals: 874

Normal Management of Public Trees: The municipal highway crew can manage and remove some trees. Large tree removals are put out to bid to qualified contractors.

Ash Inventory Conducted: 2020 on approximately 20 miles of road.

Active Tree Board or Conservation Commission: Richmond Conservation Commission of nine members. EAB task force.

Local Tree Ordinance: None at present.

EAB First Detected: EAB was detected in Richmond in the fall of 2020.

Written EAB Management Plan: A draft emerald ash borer preparedness plan has been prepared and shared with the Selectboard, but has not yet been formally approved, although all work has been carried out. Ash Management Status in 2022: Richmond's EAB Task Force will work with the Town Manager and Selectboard to include funding for future tree removals and on-going treatment into the municipal budget for future years.

Key Players: Richmond's EAB Taskforce members Caitlin Littlefield, Judy Rosovsky, Ethan Tapper, Jon Kart, Pete Gosselin, Josh Arneson, John Hamerslough.

Funding: \$15,000 grant from the Vermont Urban & Community Forestry Program for the pilot project matched by ~\$20,000 of CC reserve funds.

Wood Utilization: All larger, high quality logs will be milled into planks for use on municipal properties (e.g., renovations, benches in the Town Center) and by local artisans. The remainder of the wood will be processed for firewood and distributed to residents via a lottery.

Contacts: Caitlin Littlefield, Conservation Commission liaison, Town of Richmond, clittlef@gmail.com.

COST OF PILOT PROJECT

Activity	Pilot Project	Pilot Work Personnel
Treatment	21 ash trees totaling 300 diameter inches: Total Cost: \$3,000	Limbwalker Tree Service
Removal	Removal of 6 downtown ash trees May 2021 Total cost: \$3,600 Average cost per tree: \$600 Removal of ~30 rural road ash trees, transportation and local milling in February and March 2022 Total cost: \$19,750 Average cost per tree: ~\$650	Limbwalker Tree Service
Replanting	Purchase and planting of 10 trees Total cost: \$7500 Average cost per tree: \$750	Limbwalker Tree Service sourced the trees form Horsfords Garden & Nursery
Outreach	Printing of 2,200 postcards: \$774 Mailing: \$368 for mailing	Volunteer design. Printed locally.



Richmond plans for ash tree loss in its downtown.

ON THE GROUND

Working with a professional arborist who understood and accommodated community engagement was really helpful. We often had to be patient, listen carefully, and rethink our plans based on residents' input. Understanding that process and the time it takes is crucial for a successful project surrounding public trees.

Caitlin Littlefield, Conservation Commission Liaison and EAB Task Force Member, Town of Richmond



Volunteer Caitlin Littlefield stands near green ash trees on Church Street in downtown Richmond.



Tree planting in public spaces required inclusive communication, a clear budget for required time and money, healthy tree stock, and portable irrigation buckets.

LESSONS LEARNED

- **Public input is important and must be diplomatically heard and considered.** Many local residents offered differing opinions about proposed tree species for planting and their appropriate planting locations within public ways and places. Historic context, sight lines, and species suitability all played a role in the public discourse. Richmond EAB task force volunteers recognized the time and commitment necessary to arrive at thoughtful and well-informed decisions that met as many town criteria as possible.
- Plant first, remove later. Planting replacement trees right after or even before nearby ash tree removals presented a positive and proactive picture of overall EAB management. Diminishing the aesthetic impact of ash tree removals helped town residents envision the future tree canopy.
- **Communicate with landowners.** Give people multiple ways to learn about ash tree management and threat posed by EAB, and approach individual landowners directly when they will be impacted by municipal ash tree removals.

Vermont Urban & Community Forestry Program

Vermont Department of Forests, Parks and Recreation in partnership with University of Vermont Extension



Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Burlington, Vermont. University of Vermont Extension, and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status.